${\sf CGGACGCGTGGGACCCATACTTGCTGGTCTGATCC}$ TGTGCCCGGGCTTGGAATTCGGTGCGGATGGCCAGCTCCGGGATGACCCGCCGGGACCCGCT CGCAAATAAGGTGGCCCTGGTAACGGCCTCCACCGACGGGATCGGCTTCGCCATCGCCCGGC GTTTGGCCCAGGACGGGGCCCATGTGGTCGTCAGCAGCCGGAAGCAGCAGAATGTGGACCAG GCGGTGGCCACGCTGCAGGGGGAGGGGCTGAGCGTGACGGGCACCGTGTGCCATGTGGGGAA GGCGGAGGACCGGGCTGGTGGCCACGGCTGTGAAGCTTCATGGAGGTATCGATATCC TAGTCTCCAATGCTGCTGTCAACCCTTTCTTTGGAAGCATAATGGATGTCACTGAGGAGGTG TGGGACAAGACTCTGGACATTAATGTGAAGGCCCCAGCCCTGATGACAAAGGCAGTGGTGCC AGAAATGGAGAAACGAGGAGGCGGCTCAGTGGTGATCGTGTCTTCCATAGCAGCCTTCAGTC CATCTCCTGGCTTCAGTCCTTACAATGTCAGTAAAACAGCCTTGCTGGGCCTGACCAAGACC CTGGCCATAGAGCTGGCCCCAAGGAACATTAGGGTGAACTGCCTAGCACCTGGACTTATCAA TGCGGATAAGAAGGTTAGGCGAGCCAGAGGATTGTGCTGCATCGTGTCTTTCCTGTGCTCT GAAGATGCCAGCTACATCACTGGGGAAACAGTGGTGGTGGTGGAGGAACCCCGTCCCGCCT ATTCACCCACTGGCCTTTCCCACCTCTGCTCACCTTACTGTTCACCTCATCAAATCAGTTCT GCCCTGTGAAAAGATCCAGCCTTCCCTGCCGTCAAGGTGGCGTCTTACTCGGGATTCCTGCT GTTGTTGTGGCCTTGGGTAAAGGCCTCCCCTGAGAACACAGGACAGGCCTGCTGACAAGGCT GAGTCTACCTTGGCAAAGACCAAGATATTTTTTCCTGGGCCACTGGTGAATCTGAGGGGTGA TGGGAGAGAAGGAACCTGGAGTGGAAGGAGCAGAGTTGCAAATTAACAGCTTGCAAATGAGG 

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA35672</pre>

><subunit 1 of 1, 278 aa, 1 stop

><MW: 29537, pI: 8.97, NX(S/T): 1

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SRKQQNVDQAVATLQGEGLSVTGTVCHVGKAEDRERLVATAVKLHGGIDILVSNAAVNPFFG
SIMDVTEEVWDKTLDINVKAPALMTKAVVPEMEKRGGGSVVIVSSIAAFSPSPGFSPYNVSK
TALLGLTKTLAIELAPRNIRVNCLAPGLIKTSFSRMLWMDKEKEESMKETLRIRRLGEPEDC
AGIVSFLCSEDASYITGETVVVGGGTPSRL

Important features of the protein:

Signal peptide:

amino acids 1-15

N-glycosylation site.

amino acids 183-186

N-myristoylation sites.

amino acids 43-48, 80-85, 191-196, 213-218, 272-277

Microbodies C-terminal targeting signal.

amino acids 276-278

 ${\tt GCGGCTGGAGGAGGAGGACCGAGACTTTCTGGCTGCGCTGGAGGACGCC} \underline{{\tt ATG}} {\tt GAGCAGTACAAACTGCC}$ AGAGCGACCGGCTGCGTGAGCAGCAGGAGGAGATGGTGGAACTGCGGCTGCGGTTAGAGCTGGTGCGG  ${\tt AAGTTGGCTCTGAGCAGAGGGGAGAGCAGGTGACAAATGGCAGGGAGGCTGAGTTGCTGACT}$ GAGGTGAACAGGCTGGGAAGTGGCTCTTCAGCTGCTTCAGAGGAGGAAGAGGAGGAGGAGGAGCCGCC GGAGTCTGCCAGAGGGAGGGCCCAGAGCTTTGCCTTGAGGAGTTGGATGCAGCCATTCCAGGGTCC AGAGCAGTTGGTGGGAGCAAGGCCCGAGTTCAGGCCCGCCAGGTCCCCCCTGCCACAGCCTCAGAGTG GAGCTGGAGCAGGAGCAGAGCAGGTGCGGGCCGAGCTGAGTGAAGGCCAGAGGCAGCTGCGGGAGCT  $\tt CGGCCCAGAGCCAGGTGCAGGTGCTGAAGGAGAAGAAGCAGGCTACGGAGCGGCTGGTGTCACTGTCGGAGCCAGGGCTGGTGTCACTGTCGGAGCCAGGGCTGGTGTCACTGTCGGAGCCAGGGCTGGTGTCACTGTCGGAGCCAGGGCTGGTGTCACTGTCGGAGCCAGGCTGGTGTCACTGTCGGAGCAGGCTGGTGTCACTGTCGGAGCCAGGCTGGTGTCACTGTCGGAGCCAGGCTGGTGTCACTGTCGGAGCAGGCCAGGCTGGTGTCACTGTCGGAGCCAGGCTGGTGTCACTGTCGGAGCAGGCTACTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCACTGTCGGAGCTGGTGTCAC$ GCCCAGAGTGAGAAGCGACTGCAGGAGCTCGAGCGGAACGTGCAGCTCATGCGGCAGCAGCAGGAACA GCTGCAGAGGCGGCTTCGCGAGGAGACGGAGCAGAAGCGGCGCCTGGAGGCAGAAATGAGCAAGCGGC AGCACCGCGTCAAGGAGCTGGAGCTGAAGCATGAGCAACAGCAGAAGATCCTGAAGATTAAGACGGAA GAGATCGCGGCCTTCCAGAGGAAGAGGCGCAGTGGCAGCAACGGCTCTGTGGTCAGCCTGGAACAGCA GCAGAAGATTGAGGAGCAGAAGAAGTGGCTGGACCAGGAGATGGAGAAGGTGCTACAGCAGCGGCGG GCGCCCAGAGCCAGCAGCAGATCCGCGGGGAGATCGACAGCCTGCGCCAGGAGAAGGACTCGCTGCTC AAGCAGCGCCTGGAGATCGACGGCAAGCTGAGGCAGGGGGGGTCTGCTGTCCCCCGAGGAGGAGCGGAC GCTGTTCCAGTTGGATGAGGCCATCGAGGCCCTGGATGCTGCCATTGAGTATAAGAATGAGGCCATCA GCTCCGAGAGGAGCAGCAGCAGCAGATTGCCTTCTCGGAACTGGAGATGCAGCTGGAGGAGCAGC CTGCAGCAGAAGGAGCACGAGCAGAACATGCAGCTGCTCCTGCAGCAGAGTCGAGACCACCTCGGTGA  ${\tt AGGGTTAGCAGACAGCAGGAGGCAGTATGAGGCCCGGATTCAAGCTCTGGAGAAGGAACTGGGCCGTT}$ ACATGTGGATAAACCAGGAACTGAAACAGAAGCTCGGCGGTGTGAACGCTGTAGGCCACAGCAGGGGT GGGGAGAAGAGGGCCTGTGCTCGGAGGGCAGACAGGCTCCTGGAAATGAAGATGAGCTCCACCTGGC  ${\tt TTGATGTCCGGAAAAACCCCCTG} \underline{{\tt TAA}}{\tt GCCCTCGGGGCAGACCCTGCCTTGGAGGGAGACTCCGAGCCT}$ GCTGAAAGGGGCAGCTGCCTGTTTTGCTTCTGTGAAGGGCAGTCCTTACCGCACACCCTAAATCCAGG  $\tt CCCTCATCTGTACCCTCACTGGGATCAACAAATTTGGGCCCATGGCCCAAAAGAACTGGACCCTCATTT$ AACAAAATAATATGCAAATTCCCACCACTTACTTCCATGAAGCTGTGGTACCCAATTGCCGCCTTGTG  ${\tt TCTTGCTCGAATCTCAGGACAATTCTGGTTTCAGGCGTAAATGGATGTGCTTGTAGTTCAGGGGTTTG}$ 

</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA47465</pre>

<subunit 1 of 1, 830 aa, 1 stop

<MW: 95029, pI: 8.26, NX(S/T): 2

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LGMVPPACLPGDEVGSEQRGEQVTNGREAGAELLTEVNRLGSGSSAASEEEEEEEEPPRRTL
HLRRNRISNCSQRAGARPGSLPERKGPELCLEELDAAIPGSRAVGGSKARVQARQVPPATAS
EWRLAQAQQKIRELAINIRMKEELIGELVRTGKAAQALNRQHSQRIRELEQEAEQVRAELSE
GQRQLRELEGKELQDAGERSRLQEFRRRVAAAQSQVQVLKEKKQATERLVSLSAQSEKRLQE
LERNVQLMRQQQGQLQRRLREETEQKRRLEAEMSKRQHRVKELELKHEQQQKILKIKTEEIA
AFQRKRRSGSNGSVVSLEQQQKIEEQKKWLDQEMEKVLQQRRALEELGEELHKREAILAKKE
ALMQEKTGLESKRLRSSQALNEDIVRVSSRLEHLEKELSEKSGQLRQGSAQSQQQIRGEIDS
LRQEKDSLLKQRLEIDGKLRQGSLLSPEEERTLFQLDEAIEALDAAIEYKNEAITCRQRVLR
ASASLLSQCEMNLMAKLSYLSSSETRALLCKYFDKVVTLREEQHQQQIAFSELEMQLEEQQR
LVYWLEVALERQRLEMDRQLTLQQKEHEQNMQLLLQQSRDHLGEGLADSRRQYEARIQALEK
ELGRYMWINQELKQKLGGVNAVGHSRGGEKRSLCSEGRQAPGNEDELHLAPELLWLSPLTEG
APRTREETRDLVHAPLPLTWKRSSLCGEEQGSPEELRQREAAEPLVGRVLPVGEAGLPWNFG
PLSKPRRELRRASPGMIDVRKNPL

Important features:

Leucine zipper pattern.

amino acids 557-579, 794-815

N-glycosylation sites.

amino acids 133-136, 383-386

Kinesin related protein Kif-4 Coiled-coil domain:

amino acids 231-672

ATTCTCCTAGAGCATCTTTGGAAGCATGAGGCCACGATGCTGCATCTTGGCTCTTGTCTGCT
GGATAACAGTCTTCCTCCTCCAGTGTTCAAAAGGAACTACAGACGCTCCTGTTGGCTCAGGA
CTGTGGCTGTGCCAGCCGACACCCAGGTGTGGGAACAAGATCTACAACCCTTCAGAGCAGTG
CTGTTATGATGATGCCATCTTATCCTTAAAGGAGACCCGCCGCTGTGGCTCCACCTGCACCT
TCTGGCCCTGCTTTGAGCTCTGCTGTCCCGAGTCTTTTGGCCCCCAGCAGAAGTTTCTTGTG
AAGTTGAGGGTTCTGGGTATGAAGTCTCAGTGTCACTTATCTCCCATCTCCCGGAGCTGTAC
CAGGAACAGGAGGCACGTCCTGTACCCATAAAAAACCCCAGGCTCCACTGGCAGACGAGAC
AAGGGGAGAAGAAGAGAGCAGCTGGACATCGGAGACTACAGTTGAACTTCGGAGAGAAGCA
ACTTGACTTCAGAGGGATGGCTCAATGACATAGCTTTGGAGAGGAGCCCAGCTGGGGATGGC
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><subunit 1 of 1, 125 aa, 1 stop
><MW: 14198, pI: 9.01, NX(S/T): 1
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LKETRRCGSTCTFWPCFELCCPESFGPQQKFLVKLRVLGMKSQCHLSPISRSCTRNRRHVLYP</pre>

Important features:
Signal sequence
amino acids 1-21

N-myristoylation sites. amino acids 33-39, 70-76

TTTCCCTCCGACGCCCACGCCTGCCCAGACATTCCGGCTGCCGGGTCTGGAGAGCTCCCCG GAGAAGCGGGGACGAGGCCGGAGGATGAGCGACTGAGGGCGACGCGGGCACTGACGCGAGTT GGGGCCGCGACTACCGGCAGCTGACAGCGCGATGAGCGACTCCCCAGAGACGCCCTAGCCCG CGCCCGCTGCGAGCCCGGCGTCCGGCCCCGCGCTCATGGACGGCGGCTCCCGGCTG  $\tt GCCCGCCGGGACGTGGTAGGGG\underline{ATG}CCCAGCTCCACTGCGATGGCAGTTGGCGCGCTCTCCA$ GTTCCCTCCTGGTCACCTGCTGCCTGATGGTGGCTCTGTGCAGTCCGAGCATCCCGCTGGAG AAGCTGGCCCAGGCACCAGAGCAGCCGGGCCAGGAGAAGCGTGAGCACGCCACTCGGGACGG CCCGGGGCGGTGAACGAGCTCGGGCGCCCGGCGAGGGACGAGGGCGGCAGCGGCCGGGACT GGAAGAGCAAGAGCGGCCGTGGGCCCGCCGTGAGCCGTGGAGCAAGCTGAAGCAGGCC  ${\tt TGGGTCTCCCAGGGGGGGGGGGCCCCAAGGCCGGGGGATCTGCAGGTCCGGCCCGGGGGACAC}$ CCCGCAGGCGGAAGCCCTGGCCGCAGCCCCAGGACGCGATTGGCCCGGAACTCGCGCCCA CGCCCGAGCCACCCGAGGAGTACGTGTACCCGGACTACCGTGGCAAGGGCTGCGTGGACGAG AGCGGCTTCGTGTACGCGATCGGGGAGAAGTTCGCGCCGGGCCCCTCGGCCTGCCCGTGCCT GTGCACCGAGGGGGGCCGCTGTGCGCGCAGCCCGAGTGCCCGAGGCTGCACCCGCGCTGCA TCCACGTCGACACGAGCCAGTGCTGCCCGCAGTGCAAGGAGGAAGAACTACTGCGAGTTC CGGGGCAAGACCTATCAGACTTTGGAGGAGTTCGTGGTGTCTCCATGCGAGAGGTGTCGCTG TGAAGCCAACGGTGAGGTGCTATGCACAGTGTCAGCGTGTCCCCAGACGGAGTGTGTGGACC CTGTGTACGAGCCTGATCAGTGCTGTCCCATCTGCAAAAATGGTCCAAACTGCTTTGCAGAA ACCGCGGTGATCCCTGCTGGCAGAGAAGTGAAGACTGACGAGTGCACCATATGCCACTGTAC TTATGAGGAAGGCACATGGAGAATCGAGCGGCAGGCCATGTGCACGAGACATGAATGCAGGC  $\mathtt{AAATG}$  ACGCTTCCCAGAACACAAACTCTGACTTTTTCTAGAACATTTTACTGATGTGAA CATTCTAGATGACTCTGGGAACTATCAGTCAAAGAAGACTTTTGATGAGGAATAATGGAAAA TTGTTGGTACTTTTCCTTTGATAACAGTTACTACAACAGAAGGAAATGGATATATTTC TAAGTACACAAAAGTACACTATTATATATCAAATGTATTTCTATAATCCCTCCATTAGAGAG CTTATATAAGTGTTTTCTATAGATGCAGATTAAAAATGCTGTGTTGTCAACCGTCAAAAAAA ААААААААААААААААА

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA68818

><subunit 1 of 1, 325 aa, 1 stop

><MW: 35296, pI: 5.37, NX(S/T): 0

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AAAQDAIGPELAPTPEPPEEYVYPDYRGKGCVDESGFVYAIGEKFAPGPSACPCLCTEEGPL
CAQPECPRLHPRCIHVDTSQCCPQCKERKNYCEFRGKTYQTLEEFVVSPCERCRCEANGEVL
CTVSACPQTECVDPVYEPDQCCPICKNGPNCFAETAVIPAGREVKTDECTICHCTYEEGTWR
IERQAMCTRHECRQM

Important features of the protein:

Signal peptide:

amino acids 1-27

Transmembrane domain:

amino acids 11-30

Glycosaminoglycan attachment site.

amino acids 80-83

N-myristoylation sites.

amino acids 10-15, 102-107, 103-108

Cell attachment sequence.

amino acids 114-117

EGF-like domain cysteine pattern signature.

amino acids 176-187

 ${\tt CAGCCACAGACGGGTC} \underline{\textbf{ATG}} \\ \textbf{AGCGCGGTATTACTGCTGGCCCTCCTGGGGTTCATCCTCCCAC}$  $\tt TGCCAGGAGTGCAGGCGCTGCTCTGCCAGTTTGGGACAGTTCAGCATGTGTGGAAGGTGTCC$ GACCTACCCCGGCAATGGACCCCTAAGAACACCAGCTGCGACAGCGGCTTGGGGTGCCAGGA CACGTTGATGCTCATTGAGAGCGGACCCCAAGTGAGCCTGGTGCTCTCCAAGGGCTGCACGG AGGCCAAGGACCAGGAGCCCCGCGTCACTGAGCACCGGATGGGCCCCCGGCCTCTCCCTGATC TTGGGCCCCACAGCCCCAGCAGACCCAGGATCCTTGAGGTGCCCAGTCTGCTTGTCTATGG AAGGCTGTCTGGAGGGGACAACAGAAGAGATCTGCCCCAAGGGGACCACACACTGTTATGAT CCAGCCAGGTTGCAACCTGCTCAATGGGACACAGGAAATTGGGCCCGTGGGTATGACTGAGA ACTGCAATAGGAAAGATTTTCTGACCTGTCATCGGGGGACCACCATTATGACACACGGAAAC  $\tt TTGGCTCAAGAACCCACTGATTGGACCACATCGAATACCGAGATGTGCGAGGTGGGGCAGGT$ GTGTCAGGAGACGCTGCTCATAGATGTAGGACTCACATCAACCCTGGTGGGGACAAAAG GCTGCAGCACTGTTGGGGCTCAAAATTCCCAGAAGACCACCATCCACTCAGCCCCTCCTGGG GTGCTTGTGGCCTCCTATACCCACTTCTGCTCCTCGGACCTGTGCAATAGTGCCAGCAGCAG CAGCGTTCTGCTGAACTCCCTCCTCCTCAAGCTGCCCCTGTCCCAGGAGACCGGCAGTGTC CTACCTGTGTGCAGCCCCTTGGAACCTGTTCAAGTGGCTCCCCCGAATGACCTGCCCCAGG GGCGCCACTCATTGTTATGATGGGTACATTCATCTCTCAGGAGGTGGGCTGTCCACCAAAAT GAGCATTCAGGGCTGCGTGGCCCAACCTTCCAGCTTCTTGTTGAACCACACCAGACAAATCG GGGGCTGAGGGCCTGGAGTCTCTCACTTGGGGGGGTGGGGCTGGCACTGGCCCCAGCGCTGTG  $\tt GTGGGGAGTGGTTTGCCCTTCCTGC\underline{TAA}CTCTATTACCCCCACGATTCTTCACCGCTGCTGA$ CCACCCACACTCAACCTCCCTCTGACCTCATAACCTAATGGCCTTGGACACCAGATTCTTTC ACACTGGGGAGAGCCTGGAGCATCCGGACTTGCCCTATGGGAGAGGGGGACGCTGGAGGAGTG GCTGCATGTATCTGATAATACAGACCCTGTCCTTTCA

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA59847

><subunit 1 of 1, 437 aa, 1 stop

><MW: 46363, pI: 6.22, NX(S/T): 3

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PADPGSLRCPVCLSMEGCLEGTTEEICPKGTTHCYDGLLRLRGGGIFSNLRVQGCMPQPGCN
LLNGTQEIGPVGMTENCNRKDFLTCHRGTTIMTHGNLAQEPTDWTTSNTEMCEVGQVCQETL
LLIDVGLTSTLVGTKGCSTVGAQNSQKTTIHSAPPGVLVASYTHFCSSDLCNSASSSSVLLN
SLPPQAAPVPGDRQCPTCVQPLGTCSSGSPRMTCPRGATHCYDGYIHLSGGGLSTKMSIQGC
VAQPSSFLLNHTRQIGIFSAREKRDVQPPASQHEGGGAEGLESLTWGVGLALAPALWWGVVCPSC

## Important features of the protein:

Signal peptide:

amino acids 1-15

### Transmembrane domain:

amino acids 243-260

### N-glycosylation sites.

amino acids 46-49, 189-192, 382-385

### Glycosaminoglycan attachment sites.

amino acids 51-54, 359-362

### N-myristoylation sites.

amino acids 54-59, 75-80, 141-146, 154-159, 168-173, 169-174, 198-203, 254-259, 261-266, 269-274, 284-289, 333-338, 347-352, 360-365, 361-366, 388-393, 408-413, 419-424

 $\tt CGACG{\color{red} {\bf ATG}} CTACGCGCCCCGGCTGCCTCCTCCGGACCTCCGTAGCGCCTGCCGCGGCCCTG$ TGTCGGGCCCCGAGGCTCCGTGGCGGGACCCTGAGCTGCTGGAGGGGACCTGCACCCCGGTG CAGCTGGTCGCCCTCATTCGCCACGGCACCCGCTACCCCACGGTCAAACAGATCCGCAAGCT GAGGCAGCTGCACGGGTTGCTGCAGGCCCGCGGGTCCAGGGATGGCGGGGCTAGTACTCG GGGCAGCTAGTAGAGAAGGGACGGCAGGATATGCGACAGCTGGCGTCTGGCCTCGCT  $\tt CTTCCCGGCCCTTTTCAGCCGTGAGAACTACGGCCGCCTGCGGCTCATCACCAGTTCCAAGC$ ACCGCTGCATGGATAGCAGCGCCCCTTCCTGCAGGGGCTGTGGCAGCACTACCACCCTGGC GAGATTTTTTGATCACTGTGAGAAGTTTTTAACTGAAGTAGAAAAAAATGCTACAGCTCTTT ATCACGTGGAAGCCTTCAAAACTGGACCAGAAATGCAGAACATTTTAAAAAAAGTTGCAGCT ACTTTGCAAGTGCCAGTAAATGATTTAAATGCAGATTTAATTCAAGTAGCCTTTTTCACCTG TTCATTTGACCTGGCAATTAAAGGTGTTAAATCTCCTTGGTGTGATGTTTTTGACATAGATG ATGCAAAGGTATTAGAATATTTAAATGATCTGAAACAATATTGGAAAAGAGGATATGGGTAT ACTATTAACAGTCGATCCAGCTGCACCTTGTTTCAGGATATCTTTCAGCACTTGGACAAAGC AGTTGAACAGAAACAAAGGTCTCAGCCAATTTCTTCTCCAGTCATCCTCCAGTTTGGTCATG CAGAGACTCTTCTTCCACTGCTTTCTCTCATGGGCTACTTCAAAGACAAGGAACCCCCTAACA GCGTACAATTACAAAAAACAAATGCATCGGAAGTTCCGAAGTGGTCTCATTGTACCTTATGC  $\tt CTCGAACCTGATATTTGTGCTTTACCACTGTGAAAATGCTAAGACTCCTAAAGAACAATTCC$ GAGTGCAGATGTTATTAAATGAAAAGGTGTTACCTTTGGCTTACTCACAAGAAACTGTTTCA  ${\tt ATGTGAATTAGCAAGGGCTAACAGTACATCTGATGAACTA} {\tt \underline{TGA}} {\tt GTAACTGAAGAACATTTTT}$ ACAGGAAGCTTTTATATTACTTGAGTATTTCTGTCTTTTCACAGAAAAACATTGGGTTTCTC TCTGGGTTTGGACATGAAATGTAAGAAAAGATTTTTCACTGGAGCAGCTCTCTTAAGGAGAA ACAAATCTATTTAGAGAAACAGCTGGCCCTGCAAATGTTTACAGAAATGAAATTCTTCCTAC TTATATAAGAAATCTCACACTGAGATAGAATTGTGATTTCATAATAACACTTGAAAAGTGCT AGATTGTTCTGCAGTTCTCTTCTTTTCCTCAGGTAGGACAGCTCTAGCATTTTCTTAATC AGGAATATTGTGGTAAGCTGGGAGTATCACTCTGGAAGAAAGTAACATCTCCAGATGAGAAT TTGAAACAAGAAACAGAGTGTTGTAAAAGGACACCTTCACTGAAGCAAGTCGGAAAGTACAA TGAAAATAAATATTTTTGGTATTTATTTATGAAATATTTGAACATTTTTTCAATAATTCCTT TTTACTTCTAGGAAGTCTCAAAAGACCATCTTAAATTATTATATGTTTGGACAATTAGCAAC AAGTCAGATAGTTAGAATCGAAGTTTTTCAAATCCATTGCTTAGCTAACTTTTTCATTCTGT CACTTGGCTTCGATTTTATATTTTCCTATTATATGAAATGTATCTTTTGGTTGTTTGATTT  ${\tt TTCTTTCTTTGTAAATAGTTCTGAGTTCTGTCAAATGCCGTGAAAGTATTTGCTATAA}$ TAAAGAAAATTCTTGTGACTTTAAAAAAAAAA

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><subunit 1 of 1, 487 aa, 1 stop

><MW: 55051, pI: 8.14, NX(S/T): 2

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RDLGAALADWPLWYADWMDGQLVEKGRQDMRQLALRLASLFPALFSRENYGRLRLITSSKHR
CMDSSAAFLQGLWQHYHPGLPPPDVADMEFGPPTVNDKLMRFFDHCEKFLTEVEKNATALYH
VEAFKTGPEMQNILKKVAATLQVPVNDLNADLIQVAFFTCSFDLAIKGVKSPWCDVFDIDDA
KVLEYLNDLKQYWKRGYGYTINSRSSCTLFQDIFQHLDKAVEQKQRSQPISSPVILQFGHAE
TLLPLLSLMGYFKDKEPLTAYNYKKQMHRKFRSGLIVPYASNLIFVLYHCENAKTPKEQFRV
QMLLNEKVLPLAYSQETVSFYEDLKNHYKDILQSCQTSEECELARANSTSDEL

#### Important features:

Signal sequence

amino acids 1-30

#### N-glycosylation sites.

amino acids 242-246, 481-485

### N-myristoylation sites.

amino acids 107-113, 113-119, 117-123, 118-124, 128-134

### Endoplasmic reticulum targeting sequence.

amino acids 484-489

TCAAATCCAGCAATCGAACCCCAGTGGTACAGGAATTTGAAAGTGTGGAACTGTCTTGCATCATTACGGATTCGC AGACAAGTGACCCCAGGATCGAGTGGAAGAAAATTCAAGATGAACAAACCACATATGTGTTTTTTGACAACAAAA  ${\tt ACTCAGCCCTTTATCGCTGTGAGGTCGTTGCTCGAAATGACCGCAAGGAAATTGATGAGGATTGTGATCGAGTTAA}$  $\tt CTGTGCAAGTGAAGCCAGTGACCCCTGTCTGTAGAGTGCCGAAGGCTGTACCAGTAGGCAAGATGGCAACACTGC$ ACTGCCAGGAGAGTGAGGGCCACCCCGGCCTCACTACAGCTGGTATCGCAATGATGTACCACTGCCCACGGATT  $\tt CCAGAGCCAATCCCAGATTTCGCAATTCTTCTTTCCACTTAAACTCTGAAACAGGCACTTTGGTGTTCACTGCTG$ TCACGTTGGGCATCTGCTGCATACAGACGTGGCTACTTCATCAACAATAAACAGGATGGAGAAAGTTACAAGA  $\texttt{TGATC} \underline{\textbf{TGA}} \texttt{GACCCGCGGTGTGGCTGAGAGCGCACAGAGCGCACGTGCACATACCTCTGCTAGAAACTCCTGTCAA}$  ${\tt GGAAGCGAAACTGGGTTCACTGAGTTGGGTTCCTAATCTGTTTCTGGCCTGATTCCCGCATGAGTATTAGG}$  $\tt GTGATCTTAAAGAGTTTGCTCACGTAAACGCCCGTGCTGGGCCCTGTGAAGCCAGCATGTTCACCACTGGTCGTT$  ${\tt GAAAAGGCTTCTTACACAGCAGCCTTACTTCATCGGCCCACAGACACCACCGCAGTTTCTTCATAAAGGCTCTGC}$ TGATCGGTGTTGCAGTGTCCATTGTGGAGAAGCTTTTTGGATCAGCATTTTGTAAAAACAACCAAAATCAGGAAG  $\tt GTAAATTGGTTGCTGGAAGAGGGATCTTGCCTGAGGAACCCTGCTTGTCCAACAGGGTGTCAGGATTTAAGGAAA$  ${\tt TACATCTAAATTTTTGCTAAGGATGTATTTTGATTATTGAAAAGAAAATTTCTATTTAAACTGTAAATATATTGT}$  ${\tt TGGAAAATATCAATAATTAAGAGTATTTTACCCAAGGAATCCTCTCATGGAAGTTTACTGTGATGTTCCTTTTCT}$  ${\tt CACACAAGTTTTAGCCTTTTTCACAAGGGAACTCATACTGTCTACACATCAGACCATAGTTGCTTAGGAAACCTT}$  ${\tt TAAAAATTCCAGTTAAGCAATGTTGAAATCAGTTTGCATCTCTTCAAAAGAAACCTCTCAGGTTAGCTTTGAACT}$ GCCATCCTTGGGCCCTGGCAGTGGCTGTCCCAGTGAGCTTTACTCACGTGGCCCTTGCTTCATCCAGCACAGC  ${\tt TCTCAGGTGGGCACTGCAGGACACTGGTGTCTTCCATGTAGCGTCCCAGCTTTGGGCTCCTGTAACAGACCTCT}$  ${\tt TGAAACGCCTGAATCAAAAGCAGTTTTCTAATTTTGACTTTAAATTTTTCATCCGCCGGAGACACTGCTCCCATT}$  ${\tt TGTGGGGGGACATTAGCAACATCACTCAGAAGCCTGTGTTCTTCAAGAGCAGGTGTTCTCAGCCTCACATGCCCT}$ GGAAATGCTCCAGCAGTGGCTCAGTGCTCCCTGGTGTCTGCTGCATGGCATCCTGGATGCTTAGCATGCAAGTTC  ${\tt CCTCCATCATTGCCACCTTGGTAGAGAGGGATGGCTCCCCACCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCAGCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTGGGGGATTCACGCTCCAGCCTCCTCAGCGTTCAGCGTTCAGCGTTCAGCGTTCAGCGTTCAGCGTTCAGCGTTCAGCGTTCAGCCTCCTCAGCGTTCAGCTTCAGCGTTCAGCTTCAGCTTCAGCGTTCAGCTTCAGCGTTCAGCTC$  $\tt CGGAAAAGGAATACTCGTGTATTTTAAGATATGAATGTGACTCAAGACTCGAGGCCGATACGAGGCTGTGATTCT$ GCCTTTGGATGGATGTTGCTGTACACAGATGCTACAGACTTGTACTAACACACCGTAATTTGGCATTTGTTTAAC CTCATTTATAAAAGCTTCAAAAAAACCCA

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA77624

><subunit 1 of 1, 310 aa, 1 stop

><MW: 35020, pI: 7.90, NX(S/T): 3

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Important features of the protein:

Signal peptide:

amino acids 1-30

Transmembrane domain:

amino acids 243-263

N-glycosylation sites.

amino acids 104-107, 192-195

cAMP- and cGMP-dependent protein kinase phosphorylation site. amino acids 107-110

Casein kinase II phosphorylation site.

amino acids 106-109, 296-299

Tyrosine kinase phosphorylation site.

amino acids 69-77

N-myristoylation sites.

amino acids 26-31, 215-220, 226-231, 243-248, 244-249, 262-267

GAGGTGCCGGGCATCACGGTGCGTGTCCTGCAGGCCCTCGCCACCCTGCTCAGCTCCCCACACGGCGGTGCCCTG  ${\tt CCACAGGACACCGGCTTCTCCTGCAAGGTGCTCCTGCAGATGCTGCAGTGGCTGGACAGCCCTGGC}$  $\tt GTGCGAGGGGGCTCCTGCCCTGGCCGAGGCCCTGGCCTTCCGTCAGGACCTGGAGGTGGTCAGCTCCACCGTC$ AAGTCCTCCCGCCATCTGGCTGCCTTCATCAACAAGTTTGTGCAGTTCATCCATAAGTACATTACCTACAATGCC  $\tt CCAGCAGCCATCTCCTTGCAGAAGCACGCCGACCCGCTCCACGACCTGTCCTTCGACAACAGTGACCTGGTG$ GGCGAGGAGGAGAGCTCAGCCGGCTCCTTGCCCCTGGTCAGCGTCTCCCTGTTCACCCCTCTGACCGCGGCCGAG  ${\tt ATGGCCCCTACATGAAACGGCTTTCCCGGGGCCAAACGGTGGAGGATCTGCTGGAGGTTCTGAGTGACATAGAC}$  ${\tt GAGTGTTGCCGCAACCTCGCCTTCAGCCTGGCCCTGCGCTCCATGCAGAACAGCCCCAGCATTGCAGCCGCTTTC}$ TACGCTCTCCTGTGCCAAGAGCACGCGGCTGTGCTGCTCCACCGGGCCTTCCTGGTGGGCATGTACGGCCAGATG  ${\tt GACCCCAGCGCGCAGATCTCCGAGGCCCTGAGGATCCTGCATATGGAGGCCGTGATG} {\tt TGA}{\tt GCCTGTGGCAGCCGA}$ 

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA77631</pre>

><subunit 1 of 1, 1029 aa, 1 stop

><MW: 114213, pI: 6.42, NX(S/T): 0

MHILVVHAMVILLTLGPPRADDSEFQALLDIWFPEEKPLPTAFLVDTSEEALLLPDWLKLRM  ${\tt IRSEVLRLVDAALQDLEPQQLLLFVQSFGIPVSSMSKLLQFLDQAVAHDPQTLEQNIMDKNY}$  ${\tt MAHLVEVQHERGASGGQTFHSLLTASLPPRRDSTEAPKPKSSPEQPIGQGRIRVGTQLRVLG}$ PEDDLAGMFLQIFPLSPDPRWQSSSPRPVALALQQALGQELARVVQGSPEVPGITVRVLQAL ATLLSSPHGGALVMSMHRSHFLACPLLRQLCQYQRCVPQDTGFSSLFLKVLLQMLQWLDSPG VEGGPLRAQLRMLASQASAGRRLSDVRGGLLRLAEALAFRQDLEVVSSTVRAVIATLRSGEQ CSVEPDLISKVLQGLIEVRSPHLEELLTAFFSATADAASPFPACKPVVVVSSLLLQEEEPLA GGKPGADGGSLEAVRLGPSSGLLVDWLEMLDPEVVSSCPDLQLRLLFSRRKGKGQAQVPSFR PYLLTLFTHQSSWPTLHQCIRVLLGKSREQRFDPSASLDFLWACIHVPRIWQGRDQRTPQKR REELVLRVQGPELISLVELILAEAETRSQDGDTAACSLIQARLPLLLSCCCGDDESVRKVTE HLSGCIQQWGDSVLGRRCRDLLLQLYLQRPELRVPVPEVLLHSEGAASSSVCKLDGLIHRFI TLLADTSDSRALENRGADASMACRKLAVAHPLLLLRHLPMIAALLHGRTHLNFQEFRQQNHL SCFLHVLGLLELLQPHVFRSEHQGALWDCLLSFIRLLLNYRKSSRHLAAFINKFVQFIHKYI TYNAPAAISFLQKHADPLHDLSFDNSDLVMLKSLLAGLSLPSRDDRTDRGLDEEGEESSAG SLPLVSVSLFTPLTAAEMAPYMKRLSRGQTVEDLLEVLSDIDEMSRRRPEILSFFSTNLQRL MSSAEECCRNLAFSLALRSMQNSPSIAAAFLPTFMYCLGSQDFEVVQTALRNLPEYALLCQE HAAVLLHRAFLVGMYGQMDPSAQISEALRILHMEAVM

### Important features:

#### Signal peptide:

amino acids 1-16

cAMP- and cGMP-dependent protein kinase phosphorylation sites. amino acids 154-158, 331-335, 616-620, 785-789, 891-895

### N-myristoylation sites.

amino acids 91-97, 136-142, 224-230, 435-441, 439-445, 443-449, 665-671, 698-704

### Amidation sites.

amino acids 329-333, 634-638

AATGGCACCTTCCTGACGCTGCTGCTCTTCTGCCTGTGCGCCTTCCTCGCTGTCCTGGTA  ${\tt TGCGCGATCGGTTGCACGCAGCTGAGCAGGAGGAGCCTCAAGCGTCCAAGGAGCTCAACCTG}$ TCGCACCTGGGGCCGCCTAACAGAGGACCCCCGATTGAAGCCGTGGAACGGCTCACACCGGC ACGTGCTGCACCTGCCCACCGTCTTCCATCACCTGCCACACCTGCTGGCCAAGGAGAGCAGT GAGCGTGCGGCGCGAGGTGCACTCGTACCTGACTGACACTCTGCACTCGCTCATCTCCGAGC TACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCCCCACGGAGATCCATTCTGGGCT CCTGGAGGTCATCTCACCCTCCCCCCACTTCTACCCTGACTTCTCCCGCCTCCGAGAGTCCT TTGGGGACCCCAAGGAGAGACTCAGGTGGAGGACCAAACAGAACCTCGATTACTGCTTCCTC ATGATGTACGCGCAGTCCAAAGGCATCTACTACGTGCAGCTGGAGGATGACATCGTGGCCAA GCCCAACTACCTGAGCACCATGAAGAACTTTGCACTGCAGCAGCCTTCAGAGGACTGGATGA TCCTGGAGTTCTCCCAGCTGGGCTTCATTGGTAAGATGTTCAAGTCGCTGGACCTGAGCCTG ATTGTAGAGTTCATTCTCATGTTCTACCGGGACAAGCCCATCGACTGGCTCCTGGACCATAT TCTGTGGGTGAAAGTCTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAGCCA GGCAAGATCCAGAAACTGAAGGACAAAGACTTTGGAAAGCAGGCGCTGCGGAAGGAGCATGT GAACCCGCCAGCAGAGGTGAGCACGAGCCTGAAGACATACCAGCACTTCACCCTGGAGAAAG CCTACCTGCGCGAGGACTTCTTCTGGGCCTTCACCCCTGCCGCGGGGGACTTCATCCGCTTC CGCTTCTTCCAACCTCTAAGACTGGAGCGGTTCTTCTTCCGCAGTGGGAACATCGAGCACCC AGGAGGCCCTGCAGGAGGCCCGCCACCCTCCGGTACCCTCGGAGCCCCGACGGCTAC TCTGGAAGCACTGCGCCTCTCGATCCAGACGGACTCCCCTGTGTGGGGTGATTCTGAGCGAGA  ${\tt TCTTCCTGAAAAAGGCCGAC\underline{TAA}}{\tt GCTGCGGGCTTCTGAGGGTACCCTGTGGCCAGCCCTGAA}$ GCCCACATTTCTGGGGGTGTCGTCACTGCCGTCCCCGGAGGGCCCAGATACGGCCCCGCCCAA AGGGTTCTGCCTGGCGTCGGGCTTGGGCCGGCCTGGGCCCGCTGGCCCGGAGGCCCTA TGAGGCCCGGAACCGTTCGCACCCGGCCTGCCCCAGTCAGGCCGTTTTAGAAGAGCTTTTAC TTGGGCGCCCCCCCTCTCTGGCGCGAACACTGGAATGCATATACTACTTTATGTGCTGTTT AAAAAAAAAAAAA

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA82307</pre>

><subunit 1 of 1, 548 aa, 1 stop

>< MW: 63198, pI: 8.10, NX(S/T): 4

MRLRNGTFLTLLLFCLCAFLSLSWYAALSGQKGDVVDVYQREFLALRDRLHAAEQESLKRSK
ELNLVLDEIKRAVSERQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVLHLPTVFHHLPHLLA
KESSLQPAVRVGQGRTGVSVVMGIPSVRREVHSYLTDTLHSLISELSPQEKEDSVIVVLIAE
TDSQYTSAVTENIKALFPTEIHSGLLEVISPSPHFYPDFSRLRESFGDPKERVRWRTKQNLD
YCFLMMYAQSKGIYYVQLEDDIVAKPNYLSTMKNFALQQPSEDWMILEFSQLGFIGKMFKSL
DLSLIVEFILMFYRDKPIDWLLDHILWVKVCNPEKDAKHCDRQKANLRIRFKPSLFQHVGTH
SSLAGKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDFFWAFTPAAGD
FIRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDNPQSDKEALQEGRTATLRYPRS
PDGYLQIGSFYKGVAEGEVDPAFGPLEALRLSIQTDSPVWVILSEIFLKKAD

#### Important features:

Signal sequence

amino acids 1-23

#### N-glycosylation sites.

amino acids 5-9, 87-91, 103-107, 465-469

#### N-myristoylation sites.

amino acids 6-12, 136-142, 370-376, 509-515